

Sup S1c

Medium N°	Different hormones, cytokines or chemicals supplemented in the DMEM																			MRF expression			
	AZA 10µM	EGF 100nM	IL-4 1nM	DHT 30nM	Tes 100nM	Ins 1µM	Dex 1µM	Bio 1µM	LiCl 5mM	Pur 2µM	Cyc 5µM	T3 0.2nM	VD3 10nM	TPA 5µM	IBMX 100µM	BuS 10mM	VaA 10mM	Rev 5µM	MDA 75µM	Myotube formation	Pax7	MyoD	Myogenin
1																				NO	NO	NO	NO
2	AZA																			NO	NT	NT	NT
3		EGF																		NO	NO	NO	NO
4			IL-4																	NO	NT	NT	NT
5				DHT																NO	NT	NT	NT
6					Tes															NO	NT	NT	NT
7						Ins														NO	NO	NO	NO
8							Dex													NO	NO	NO	NO
9								Bio												NO	NO	NO	NO
10									LiCl											NO	NO	NO	NO
12										Pur										NO	NO	NO	NO
13											Cyc									NO	NO	NO	NO
14												T3								NO	NO	NO	NO
15													VD3							NO	NO	NO	NO
16														TPA						NO	NO	NO	NO
17															IBMX					NO	NO	NO	NO
18																BuS				NO	NO	NO	NO
19																	VaA			NO	NO	NO	NO
20																		Rev		NO	NO	NO	NO
21						Ins			LiCl											NO	NT	NT	NT
22		EGF				Ins														NO	NT	NT	NT
23				DHT		Ins														NO	NT	NT	NT
24					Tes	Ins														NO	NT	NT	NT
25			IL-4			Ins														NO	NT	NT	NT
26						ins													MDA	NO	NT	NT	NT
27						Ins		Bio												NO	NO	NO	NO
28						Ins		Bio										Rev		NO	NO	NO	NO
29						Ins		Bio								BuS				NO	NO	NO	NO
30						Ins		Bio								BuS		Rev		NO	NO	NO	NO
31						Ins		Bio		Pur										NO	NO	NO	NO
32						Ins		Bio			Cyc									NO	NO	NO	NO
33						Ins		Bio			Cyc							Rev		NO	NO	NO	NO
34						Ins		Bio		Pur								Rev		NO	NO	NO	NO
35						Ins		Bio			Cyc					BuS		Rev		NO	NO	NO	NO
36						Ins		Bio		Pur						BuS		Rev		NO	NO	NO	NO
37						Ins		Bio		Pur				TPA		BuS		Rev		NO	NO	NO	NO
38						Ins		Bio			Cyc			TPA		BuS		Rev		NO	NO	NO	NO
39						Ins	Dex													NO	NO	NO	NO
40						Ins	Dex	Bio												NO	NO	NO	NO
41						Ins	Dex	Bio						TPA						NO	NO	NO	NO
42						Ins	Dex	Bio					VD3	TPA						NO	NO	NO	NO
43						Ins	Dex	Bio		Pur										NO	NO	NO	NO
44						Ins	Dex	Bio		Pur					IBMX					NO	NO	NO	NO
45						Ins	Dex	Bio		Pur					IBMX	BuS				NO	NO	NO	NO
46						Ins	Dex	Bio						TPA	IBMX	BuS				NO	NO	NO	NO
42						Ins	Dex	Bio			Cyc			TPA	IBMX	BuS				NO	NO	NO	NO
43						Ins	Dex	Bio			Cyc				IBMX	BuS				NO	NO	NO	NO
44						Ins	Dex	Bio						TPA						NO	NO	NO	NO
45						Ins	Dex	Bio				T3		TPA						NO	NO	NO	NO
46						Ins	Dex	Bio					VD3	TPA						NO	NO	NO	NO

NO : No myotubes were observed or MRF detected

NT : Not Tested

AZA : 5-azacytidin, DNA-demethylating agent; EGF : Epidermal Growth Factor; IL-4 : Interleukin-4; DHT : Dehydrotestosterone; Tes : Testosterone; Ins : Insulin; Dex : Dexamethasone, glucocorticoid receptor agonist; Bio : Glycogene synthase-3 inhibitor, activator of wnt signaling pathway; LiCl : Lithium Chloride, Glycogene synthase-3 inhibitor; Pur : Purmorphamine, an activator of hedgehog pathway; Cyc : Cyclopamine, an inhibitor of hedgehog signaling pathway; T3 : Triiodothyronine, thyroid hormone; VD3 : 1a, 25-dihydroxy-vitamine D3; TPA : 12-O-Tetradecanoyl-Phorbol-13-Acetate, activator of protein kinase-C; IBMX : IsoButylMethylXanthine, inhibitor of phosphodiesterase; BuS : Sodium Butanoate, inhibitor of histone deacetylase; VaA : Valproic Acid, inhibitor of histone deacetylase; Rev : Reversine, induce C2C12 cells dedifferentiation; MDA : Methyl-Adenosine, promote C2C12 cells differentiation